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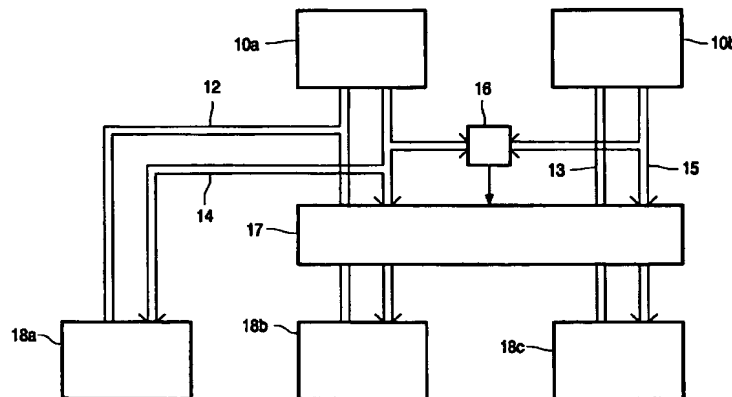
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(54) Title: DATA PROCESSING APPARATUS WITH ADDRESS REDIRECTION IN RESPONSE TO PERIODIC ADDRESS PATTERNS

(57) Abstract: A processing system comprises a detection unit which detects repetitions of periods of access address patterns output from at least one of a plurality of processing units. The interface switches selectable connections between the data input and/or outputs of the processing units and the data input and/or outputs of selectable ones of a plurality of memory units. As a result a same addresses from at least one of the plurality of processing units alternately addresses a location in different ones of the memory units in dependence on the detection of said repetition. Preferably, the detection unit contains an address comparator arranged to detect whether addresses from the address output of a first one of the data processing units fall in a range of one or more addresses associated with the memory units. The detector generates a detection signal indicating the new one of said repetitions each time when one of the addresses from the address output of the first one of the data processing units has output addresses in said range a certain number of times.

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